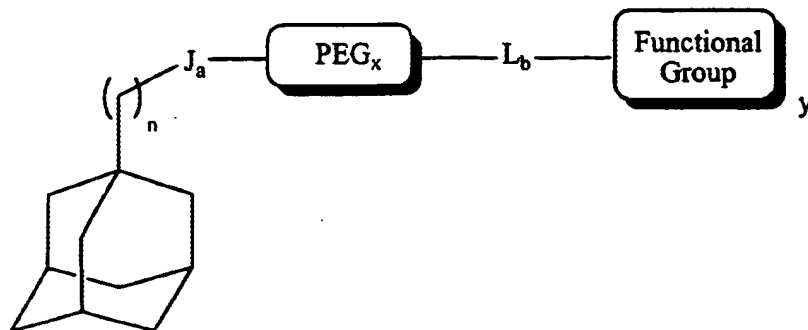


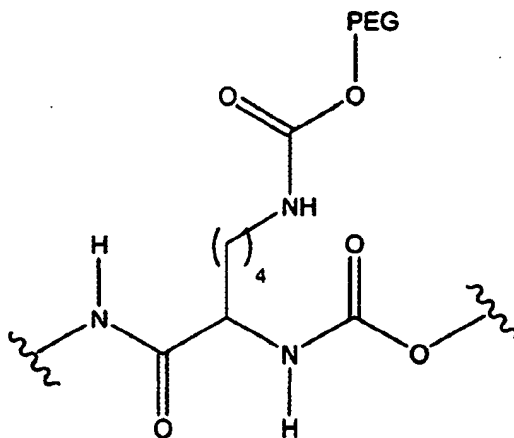
IN THE CLAIMS

1. (Withdrawn) An adamantane derivative of the formula:



wherein

J is -NH- , $\text{-C(=O)NH-(CH}_2\text{)}_d\text{-}$, $\text{-NH-C(=O)-(CH}_2\text{)}_d\text{-}$, $\text{-CH}_2\text{SS-}$,
 $\text{-C(=O)O-(CH}_2\text{)}_e\text{-O-P(=O)(O-(CH}_2\text{)}_e\text{-Ad)O-}$,



a peptide or polypeptide residue, or $\text{-NH(C=O)-CH(R}^1\text{)-NH-(C=O)-CH(R}^1\text{)-NH-}$;

Ad is adamantyl;

R^1 is $\text{-(CH}_2\text{)}_a\text{-CO}_2\text{H}$, an ester or salt thereof; or

$\text{-(CH}_2\text{)}_a\text{-CONH}_2$;

PEG is $\text{-O(CH}_2\text{CH}_2\text{O)}_z\text{-}$, where z varies from 2 to 500;

L is H, -NH_2 , $\text{-NH-(C=O)-(CH}_2\text{)}_e\text{-(C=O)-CH}_2\text{-}$, $\text{-S(=O)}_2\text{-HC=CH}_2\text{-}$, -SS- , -C(=O)O- or a carbohydrate residue;

a is 0 or 1;

b is 0 or 1;

d ranges from 0 to 6;
e ranges from 1 to 6;
y is 0 or 1; and
x is 0 or 1.

2. (Withdrawn) A composition comprising a particulate composite of a polymer and a therapeutic agent and an inclusion complex of said polymer and a complexing agent having a functional group.
3. (Withdrawn) A composition of claim 2, wherein said polymer has host functionality and said complexing agent has guest functionality.
4. (Withdrawn) A composition of claim 2, wherein said polymer has guest functionality and said complexing agent has host functionality.
5. (Withdrawn) A composition of claim 2, wherein said polymer has host and guest functionality and comprising a mixture of complexing agents having guest and host functionality.
6. (Withdrawn - currently amended) A composition of claim 3, 4, or 5 wherein said host functionality is selected from the group of cyclodextrin, a ~~carecerand~~ carcerand, a ~~cavitand~~ cavitand, a crown ether, a cryptand, a cucurbituril, a ~~calixerane~~ calixerene, a spherand or a mixture thereof.
7. (Withdrawn) A composition of claim 3, 4, or 5 wherein said complexing agent further comprises a spacer group.
8. (Withdrawn) A composition of claim 3, 4, or 5, wherein said inclusion guest is selected from the group consisting of adamantane, diadamantane, naphthalene, and cholesterol.
9. (Withdrawn) A composition of claim 8, wherein said host functionality is a cyclodextrin and said inclusion guest is adamantane or diadamantane.

10. (Withdrawn - currently amended) A composition of claim 2, 3, 4, or 5 wherein said functional group of said functional group is a ligand, nuclear localization signal, endosomal release peptide, endosomal release polymer, a second therapeutic agent, a stabilizing polymer/hydrophilic polymer for stabilization or a mixture thereof, and said spacer group is selected from the group consisting of: a direct link, a ~~phosphate~~ phosphate group, and polyethylene glycol and a short anionic peptide sequence.
11. (Withdrawn - currently amended) A composition of claim 2, 3, 4, or 5 wherein said therapeutic agent is selected from the group consisting of an antibiotic, a steroid, a polynucleotide, small molecule pharmaceutical, a ~~virus~~ virus, a plasmid, a peptide, a peptide fragment, a chelating agent, a biologically active macromolecule, and mixtures thereof.
12. (cancelled)
13. (Withdrawn) A method of delivering a therapeutic comprising the step of administering to a person in recognized need of the therapeutic agent a therapeutically effective amount of a composition of claim 2, 3, or 5.
14. (currently amended) A method of preparing a composition, comprising combining a therapeutic agent, a cyclodextrin-containing polymer having host and/or guest functionality, and a complexing agent comprising at least one functional group and at least one host/guest moiety that forms an inclusion complex with a host/guest moiety of said cyclodextrin-containing polymer to form the composition, wherein ~~said cyclodextrin-containing polymer and said complexing agent form an inclusion complex, and~~ said therapeutic agent, cyclodextrin-containing polymer, and complexing agent are separate molecules.
15. (currently amended) A method of claim 14, wherein said therapeutic agent is first combined with said cyclodextrin-containing polymer and the resulting mixture is then combined with said complexing agent such that said cyclodextrin-containing polymer and said complexing agent form an inclusion complex.

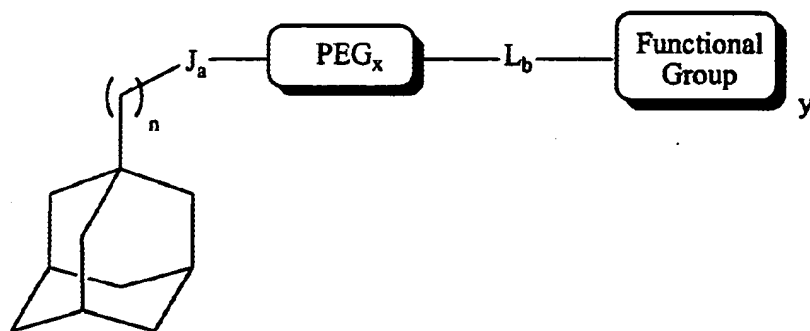
16. (currently amended) A method of claim 14, wherein said cyclodextrin-containing polymer is first combined with said complexing agent to form an inclusion complex and said inclusion complex is combined with said therapeutic agent.

17. (cancelled)

18. (Previously presented) A method of claim 14, wherein said therapeutic agent is selected from an antibiotic, a steroid, a polynucleotide, small molecule pharmaceutical, a virus, a plasmid, a peptide, a peptide fragment, a chelating agent, a biologically active macromolecule, and mixtures thereof.

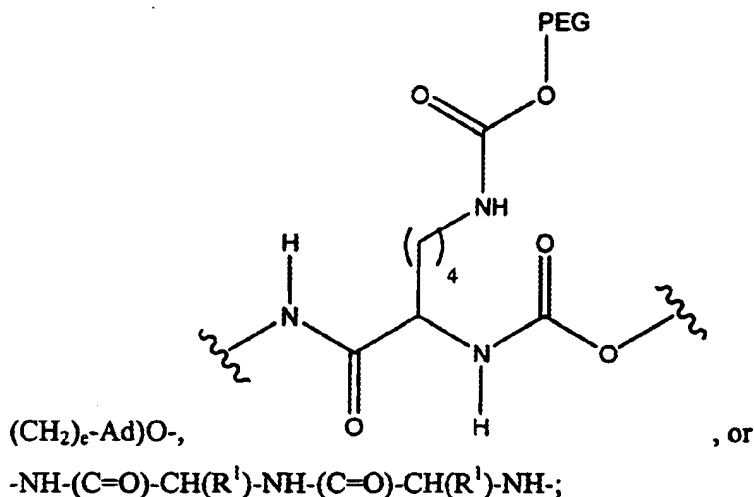
19. (Previously presented) A method of claim 18, wherein said therapeutic agent is a polynucleotide.

20. (Previously presented) A method of claim 14, wherein the complexing agent is an adamantane derivative of the formula:



wherein

J is $-\text{NH}-$, $-\text{C}(=\text{O})\text{NH}-\text{CH}_2)_d-$, $-\text{NH}-\text{C}(=\text{O})-(\text{CH}_2)_d-$, $-\text{CH}_2\text{SS}-$, $-\text{C}(=\text{O})\text{O}-(\text{CH}_2)_e-\text{O}-\text{P}(=\text{O})(\text{O}-$



Ad is adamantyl;

R^1 is $-(CH_2)-CO_2H$, an ester or salt thereof; or $-(CH_2)_2-CONH_2$;

PEG is $-\text{O}(\text{CH}_2\text{CH}_2\text{O})_z-$, where z varies from 2 to 300;

L is H, -NH, -NH-(C=O)-(CH₂)_e-(C=O)-CH₂-, -S(=O)₂-HC=CH-, -SS-, -C(=O)O-, or a carbohydrate residue;

a is 0 or 1;

b is 0 or 1;

d ranges from 0 to 6;

e ranges from 1 to 6;

n ranges from 0 to 6;

y is 1; and

x is 0 or 1.

21. (cancelled)

22. (cancelled)

23. (currently amended) A method of claim 14, wherein ~~the~~ at least one functional group includes a group selected from a ligand, a nuclear localization signal, an endosomal release peptide, an endosomal release polymer, or a membrane permeabilization agent.

24. (currently amended) A method of claim 14, wherein ~~the~~ at least one functional group includes a moiety that increases the solubility of the composition under biological conditions relative to a composition of the cyclodextrin-containing polymer and therapeutic agent alone.
25. (currently amended) A method of claim 14, wherein ~~the~~ at least one functional group includes a moiety that stabilizes the composition under biological conditions relative to a composition of the cyclodextrin-containing polymer and therapeutic agent alone.
26. (currently amended) A method of claim 14, wherein ~~the~~ at least one functional group includes a therapeutic agent reversibly bound to the complexing agent.
27. (currently amended) A method of claim 14, wherein the cyclodextrin-containing polymer comprises ~~[[a]]~~ at least one host moiety that forms an inclusion complex with ~~[[a]]~~ at least one guest moiety of the complexing agent.
28. (currently amended) A method of claim 14, wherein the cyclodextrin-containing polymer comprises ~~[[a]]~~ at least one guest moiety that forms an inclusion complex with ~~[[a]]~~ at least one host moiety of the complexing agent.
29. (currently amended) A method of claim 14, wherein the complexing agent further comprises a spacer group positioned between ~~the~~ at least one functional group and ~~the~~ at least one host/guest moiety of the complexing agent.
30. (currently amended) A method of claim 14, wherein ~~the~~ at least one guest moiety is an adamantyl group and ~~the~~ at least one host moiety is a cyclodextrin moiety.
31. (currently amended) A method of claim 14, wherein ~~the~~ at least one host/guest moiety of the complexing agent is selected from adamantyl, diadamantyl, naphthyl, cholesterol, cyclodextrin, and mixtures thereof.

32. (new) A method of claim 14, wherein the cyclodextrin-containing polymer comprises a linear cyclodextrin-containing polymer wherein cyclodextrin moieties are present in the backbone of the polymer.
33. (new) A method of claim 14, wherein the cyclodextrin-containing polymer contains at least one cyclodextrin moiety in a pendant or branched chain of the cyclodextrin-containing polymer.
34. (new) A method of claim 14, wherein the complexing agent comprises at least one polymer portion.
35. (new) A method of claim 34, wherein at least one polymer portion of the complexing agent comprises PEG or derivatives thereof.
36. (new) A method of claim 14, wherein at least one functional group comprises at least one polymer portion.
37. (new) A method of claim 29, wherein the spacer group comprises at least one polymer portion.